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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 63988 (71719) U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/549574</b>
INTERNATIONAL APPLICATION NO.  PCT/JP2004/001940	INTERNATIONAL FILING DATE  19 February 2004	PRIORITY DATE CLAIMED JP 2003-070544 filed March 14, 2003 JP 2003-294680 filed August 18, 2003 JP 2003-294679 filed August 18, 2003
TITLE OF INVENTION CHEMICAL DIFFUSION SYSTEM, CHEMICAL DIFFUSION APPARATUS, CHEMICAL DIFFUSION UNIT AND CHEMICAL CARTRIDGE		
APPLICANT(S) FOR DO/EO/US Kiyoshi ITO, <i>et al.</i>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). <b>Items 11 to 20 below concern document(s) or information included:</b> 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98 (along with PTO/SB-08 – with citations). 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment. 14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).		

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U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/549374</b>		INTERNATIONAL APPLICATION NO. PCT/JP2004/001940		ATTORNEY'S DOCKET NUMBER 63988 (71719)	
20. <input checked="" type="checkbox"/> Other items or information:		Copy of PCT/RO/101 (with English translation); cover page of International Publication (WO 2004/080169 A1); copy of International Search Report (with English translation); copy of Form PCT/IB/304; copy of Form PCT/IB/308; copy of Form PCT/ISA/237; Nineteen (19) sheets of Fig. 1 – Fig. 19c; Certificate of Express Mailing; and return receipt postcard.			
The following fees have been submitted				<b>CALCULATIONS</b>	<b>PTO USE ONLY</b>
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))		..... \$300		\$ 300.00	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))					
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....		\$0		\$ 200.00	
All other situations .....		\$200			
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))					
If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....		\$0			
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....		\$100		\$ 500.00	
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB .....		\$400			
All other situations .....		\$500			
<b>TOTAL OF 21, 22 and 23 =</b>				<b>\$ 1,000.00</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
89 - 100 =	/50 =		x \$250.00	\$	
Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$ 130.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	66 - 20 =	46	x 50.00	2,300.00	
Independent claims	2 - 3 =		x	0.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$ 3,430.00</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					
<b>SUBTOTAL =</b>				<b>\$ 3,430.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
<b>TOTAL NATIONAL FEE =</b>				<b>\$ 3,430.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$ 3,430.00</b>	
				Amount to be refunded:	\$
				Amount to be charged	\$

10/549374

JC20 Rec'd PCT/PTO 14 SEP 2005

PTO-1390 (Rev. 07-2005)

Approved for use through 03/31/2007. OMB 0651-0021

U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 04-1105 in the amount of \$ 3,430.00 to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 04-1105. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

  
SIGNATUREJohn J. Penny  
NAME

CUSTOMER NUMBER: 21874

36,984  
REGISTRATION NUMBER

10/549374

JC20 Rec'd PCT/PTO 14 SEP 2005

Application No. (if known): Not Yet Assigned

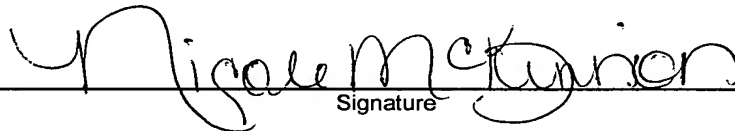
Attorney Docket No.: 63988 (71719)

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV 654389364 US in an envelope addressed to:

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Alexandria, VA 22313-1450

on September 14, 2005  
Date



Signature

Nicole McKinnon

Typed or printed name of person signing Certificate

Registration Number, if applicable

(617) 439-4444  
Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Fee Transmittal (1 page);  
Preliminary Amendment (32 pages);  
Transmittal Letter to the United States Designated-Elected Office (3 pages);  
70 pages consisting of specification, claims & abstract;  
19 sheets of Fig. 1 – Fig. 19c;  
Copy of PCT/RO/101 (with English translation);  
Copy of cover page of International Publication (WO 2004/080169 A1);  
Copy of International Search Report (with English translation);  
Copy of PCT/IB/304; copy of Form PCT/IB/308; copy of Form PCT/ISA/237;  
Information Disclosure Statement (2 pages);  
IDS (Citation) by Applicant (11 References);  
Charge \$3,430.00 to deposit account 04-1105; and return receipt postcard.

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). <b>FEE TRANSMITTAL</b> <b>For FY 2005</b>		<b>Complete, if Known</b> Application Number <b>101548374</b> Filing Date <b>Concurrently Herewith</b> First Named Inventor <b>Kiyoshi Ito</b> Examiner Name <b>Not Yet Assigned</b> Art Unit <b>N/A</b> Attorney Docket No. <b>63988 (71719)</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27			
<b>TOTAL AMOUNT OF PAYMENT</b> (\$ ) <b>3,430.00</b>			

**METHOD OF PAYMENT** (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_  
☒ Deposit Account Deposit Account Number: **04-1105** Deposit Account Name: **Edwards & Angell, LLP**

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee  
☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
66	- 66 =	x	=			
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)			
2	- 3 =	x	=			

**3. APPLICATION SIZE FEE**

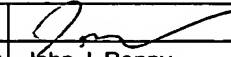
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/50	(round up to a whole number) x	=	

**4. OTHER FEE(S)**

	Fees Paid (\$)
Non-English Specification, \$130 fee (no small entity discount)	
Other (e.g., late filing surcharge):	
1631 Basic National Stage fee	300.00
1632 National Stage Search Fee - all other situations	500.00
1633 National Stage Examination Fee - all other ...	200.00
1615 National Stage claims - extra total (over twenty)	2,300.00
1617 Search fee, examination fee or oath or ...	130.00

**SUBMITTED BY**

Signature		Registration No. (Attorney/Agent)	36,984	Telephone	(617) 439-4444
Name (Print/Type)	John J. Penny	Date	September 14, 2005		

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 654389364 US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: September 14, 2005

Signature:  (Nicole McKinnon)